

CLAIMS:

- [1] A cleaning brush comprising a brush body (2), a binder (3) and a grip handle (1), the binder clamping the brush body at its periphery of a middle portion 'c' in the direction of width of the brush body, the binder securing the brush body to an end (11) of the grip handle, characterized in that the brush body (2) is composed of a number of elemental fibers (22) each being a crimped drawn monofilament (21) that has a generally triangular cross section, the elemental fibers are arranged parallel and twisted to form a string (23), a number of the strings of the same length are arranged in parallel and side by side so that a fiber fixing means (24) is applied to the middle portion 'c' in the direction of width 'w' so as to form an array (25) of the strings, with the fixing means preventing displacement of each elemental fiber (22), and the array is wound up from one of its opposite ends to form a massive scroll serving as the brush body (2).
- [2] A cleaning brush comprising a brush body (4), a binder (3) and a grip handle (1), the binder clamping the brush body at its periphery of a middle portion 'c' in the direction of width of the brush body, the binder securing the brush body to an end (11) of the grip handle, characterized in that the brush body (4) is composed of a number of elemental fibers (42) each being a crimped drawn monofilament (41) that has a generally tetragonal cross section and four ridges (40) protruding radially and outwards, the elemental fibers are arranged parallel and twisted to form a string (43), a number of the strings of the same length are arranged in parallel and side by side so that a fiber fixing means (24) is applied to the middle portion 'c' in the direction of width 'w' so as to form an

array (45) of the strings, with the fixing means preventing displacement of each elemental fiber (42), and the array is wound up from one of its opposite ends to form a massive scroll serving as the brush body (4).

- [3] A cleaning brush as defined in claim 1 or 2, wherein each monofilament (21, 41) is a polyester fiber as exemplified by a polyethylene terephthalate fiber.
- [4] A cleaning brush as defined in claim 1 or 2, wherein each monofilament (21, 41) has a thickness falling within a range of 20 to 100 denier.
- [5] A cleaning brush as defined in claim 1 or 2, wherein the fiber fixing means (24) is the sewing with use of a sewing thread.
- [6] A cleaning brush as defined in claim 1 or 2, wherein the fiber fixing means (24) is a thermal press causing a fusion bonding.
- [7] A cleaning brush as defined in claim 1 or 2, wherein each string (23, 43) has a thickness substantially of 2 to 10 *mm* in its non-compressed state.
- [8] A cleaning brush as defined in claim 1 or 2, wherein the binder (3) is made of a material selected from a group consisting synthetic resins and metals.
- [9] A cleaning brush as defined in claim 1 or 2, wherein the grip handle (1) is made of a material selected from a group consisting synthetic resins, wood sticks and bamboo sticks.
- [10] A cleaning brush as defined in claim 9, wherein the grip handle (1) is made of a material selected from a polyolefin group including polypropylenes and polyethylenes.